EXPLANATION OF DATA

The information presented here was compiled on deaths, which came under the jurisdiction of the Medical Examiner during the calendar year 2001. The role of alcohol, drugs, and firearm use in violent deaths is emphasized in the report. Health agencies, safety councils, and lawmakers may find these statistics useful. If the quality of life in King County is to be improved perhaps this report can serve as the basis for change.

The geographic area served by the Medical Examiner includes all 2,130 square miles of King County, bounded by Pierce County to the south, Snohomish County to the north, Kittitas and Chelan Counties to the east and Puget Sound to the west. In 2000 the King County population was estimated to be 1,737,034[3]. Included within King County are 39 cities and towns including Seattle, the state's largest city. Also within King County are Vashon Island, two major airports and several colleges and universities, all coming under the Medical Examiner's jurisdiction. In King County more than twenty hospitals as well as major trauma centers serve the entire Pacific Northwest region.

Demographics in this report are summarized from individual cases under jurisdiction of the Medical Examiner, and presented here in aggregate form. The location (Nearest Incorporated City to the Fatal Incident, Table 1-8, page 17) represents the location of the incident, to the nearest city, not the residential address of the individual. Each manner (category) of death is subdivided into the various sub-groupings (methods) appropriate to that manner, which together form a more detailed description of the cause and manner of death.

The variables displayed in the tables such as race, gender, age, etc., have been selected as those most likely to assist and interest individuals using this data in assembling a profile of death statistics for 2001. According to 2000 Census estimates, racial distribution of King County is 75.7% White, 5.4% Black, 4.1% two or more races indicated (new category for the year 2000), 11.3% Asian including Hawaiian and other Pacific Islanders, 0.9% Native American, and 2.6% other. Hispanic origin is a separate question from race in Census data and cannot be used to compare with Medical Examiner data. In addition, as emphasized in Table 1-9 on page 19, in 12.5% of Medical Examiner cases the incident leading to death occurred outside of King County and the decedent was probably not a resident of King County. Therefore, Medical Examiner figures cannot be directly compared to the racial distribution of King County residents. As a rough estimate, however, the only manner of death that varies from the racial distribution of the county by a large percentage is Homicide. A further discussion of these figures is found in the Homicide section on page 41.

[1] PL94-171 Redistricting File from the 2000 Census of Population and Housing.

Age groups are divided into youth and adult. The youth groups are infants (newborn to 11 months), toddlers (1-5 years), grade school (6-12 years), junior high (13-15 years), and high school (16-19 years). Adult age groups are in corresponding decades with the last being 90 years old or older.

Blood alcohol (ethanol) data included here represent the blood level at the time of death. Alcohol is metabolized at a rate of 0.015 to 0.018 grams percent per hour. Thus, if there is a significant survival interval, the blood alcohol at the time of death will be lower than at the time of incident. Consequently, blood alcohol tests are not performed in cases where death occurs more than twenty-four hours after the fatal injury. For these reasons, an unknown number of cases not tested or showing no blood alcohol may actually have had a measurable alcohol concentration at the time of the incident.

Three sections are included that review specific issues. Data are presented which highlights deaths due to drugs, firearms, and death among children and youth. The firearm data pertain to the victim because data relating to the shooter are not included in the Medical Examiner's investigation. On deaths among children and youth, the analysis focuses on violent, non-natural causes of death.

Data on natural deaths are included. However, these deaths due to natural causes are not representative of all natural deaths in King County. Natural deaths which are investigated by the Medical Examiner are those which occur suddenly and unexpectedly with no physician in attendance, or under suspicious circumstances. Such natural deaths comprise 39.2% (619/1,578) of all deaths investigated by the Medical Examiner.

The "circumstances undetermined" category includes deaths in which the manner could not be clearly determined. In some cases, serious doubt existed as to whether the injury occurred with intent or as a result of an accident. In others, lack of witnesses or prolonged time between death and discovery precluded the accurate determination of the circumstances surrounding death. Moreover, it may be difficult to assess street drug or medication overdose deaths as showing enough features to reasonably determine the manner of death.

Those interested in obtaining more specific information should seek our assistance, as additional data are available and more specific analysis is possible.

MEDICAL EXAMINER CASES IN 2001

The following provides a summary of the raw data from the Medical Examiner's 2001 cases.

In 2001 there were an estimated 13,012 deaths in King County[2] (0.75% of a 2000 population estimate of 1,737,034). Of these deaths, 6,758 (52%) were reported to the Medical Examiner by medical and law enforcement personnel. Based on analysis of the scene and circumstances of death, and the decedent's medical history gathered by the medical investigators, the Medical Examiner Division assumed jurisdiction in 1,630 of these reported deaths, of which 51 were ultimately found to be non-human remains. One case of skeletal remains was archeological and, therefore, not of forensic interest. Throughout the discussion of data that follows, except where stated, the non-human, and archeological cases are excluded. The number of applicable cases used in this report is 1,578 deaths.

Of note is that there were 5,180 deaths reported to the Medical Examiner in which jurisdiction was not assumed. The Medical Examiner's Office applies a strict interpretation of the legislative language "persons who die suddenly when in apparent good health and without medical attendance within thirty-six hours preceding death" (RCW 68.50). Jurisdiction is only assumed if both conditions (lack of medical care, apparent good health) apply and there is no attending outside physician with sufficient knowledge of the individual's natural disease condition who is able to certify the death.

Autopsies were performed in 71.9% (1,135/1,578) of the jurisdictional deaths. Autopsies by a Medical Examiner pathologist were not performed in deaths where scene, circumstances, medical history, and external examination of the body provided sufficient information for death certification. In 2001 there were 218 such deaths, accounting for 13.8% (218/1,578) of the total deaths. In addition, there were 219 deaths (13.9%) certified by attending private physicians after review by and consultation with the Medical Examiner.

Several factors appear repeatedly in the unnatural deaths. Of all traffic fatalities in which tests were performed, 33% (61/185) tested positive for presence of alcohol (ethanol) in the blood. Firearms were the most frequent instrument of death in the homicides and suicides, accounting for 58% (43/74) of the homicides and 46% (85/183) of the suicides. In recognition of the importance of safety devices in traffic accidents, Medical Examiner data indicate that of the 151 vehicle occupants who died, 34% (51/151) were wearing restraints. In 21 deaths involving motorcyclists, 95% (20/21) were wearing helmets.

[2] Death certificates filed in King County.

The remainder were either not wearing restraints or helmets or represent cases in which the use of those items is not known.

While the discussion here tends to depict the more violent types of death, the reader should be reminded that 39.2% (619/1,578) of Medical Examiner cases involve natural deaths. Specific discussion and presentation of relevant tables regarding 2001 cases follow this brief summary.

Table 1-1 Deaths Occurring in King County and Medical Examiner Cases

CASES BY MANNER OF DEATH [3]		NUMBER OF DEATHS	PERCENT OF DEATHS
Accident Other	(A)	419	26.6%
Accident Traffic	(T)	220	13.9%
Homicide	(H)	74	4.7%
Natural	(N)	619	39.2%
Suicide	(S)	183	11.6%
Undetermined	(U)	63	4.0%
Total KCME general cases		1,578	100.0%
Non-applicable cases where jurisdiction was assumed		51	
Total KCME jurisdiction cases		1,629	
Total KCME general cases [4]		1,578	
Deaths reported to KCME but no jurisdiction was assumed (NJA) [5]		5,180	
All other deaths in King County not reported to KCME		6,254	
ALL KING COUNTY DEATHS [6]		13,012	

[3] The letters following each manner of death will be used in most tables throughout this report.

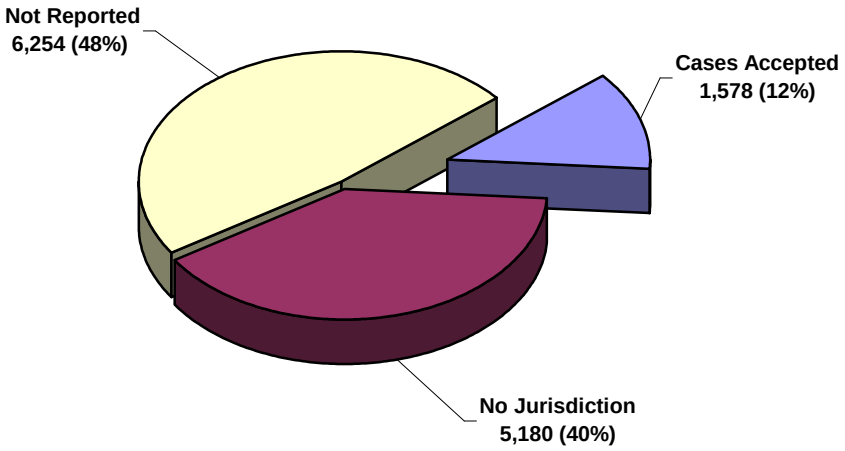
[4] This is the total that will be referred to throughout this report unless otherwise noted.

[5] Non-applicable includes (41) non-human bones: (9) non-human tissue or remains; and (1) archaeological skeletal remains.

[6] From King County Vital Statistics data.

Graph 1-1 All King County Deaths with Medical Examiner Jurisdiction Shown

There were 13,012 deaths in King County in 2001.



Graph 1-2 Manner of Death for All Medical Examiner Jurisdiction Cases

Jurisdiction assumed in 1,629 cases

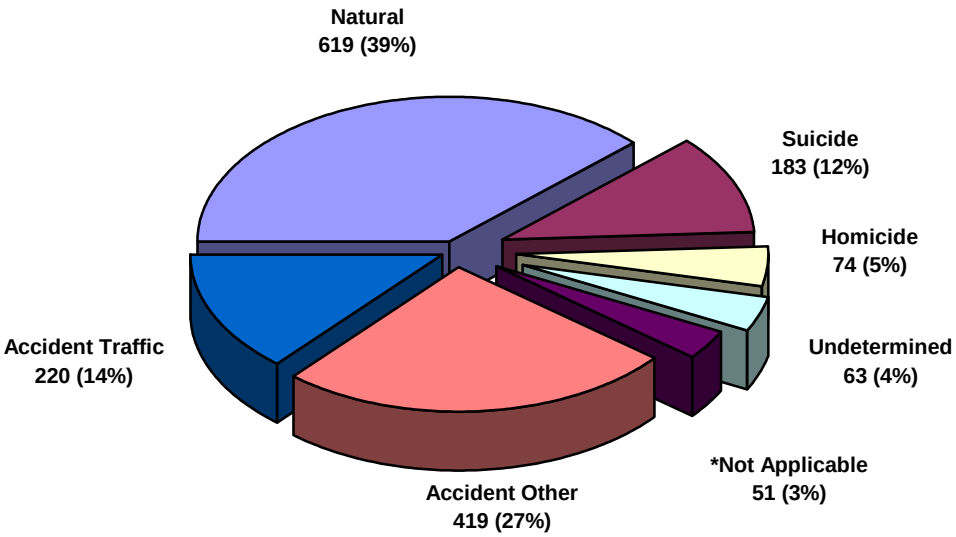
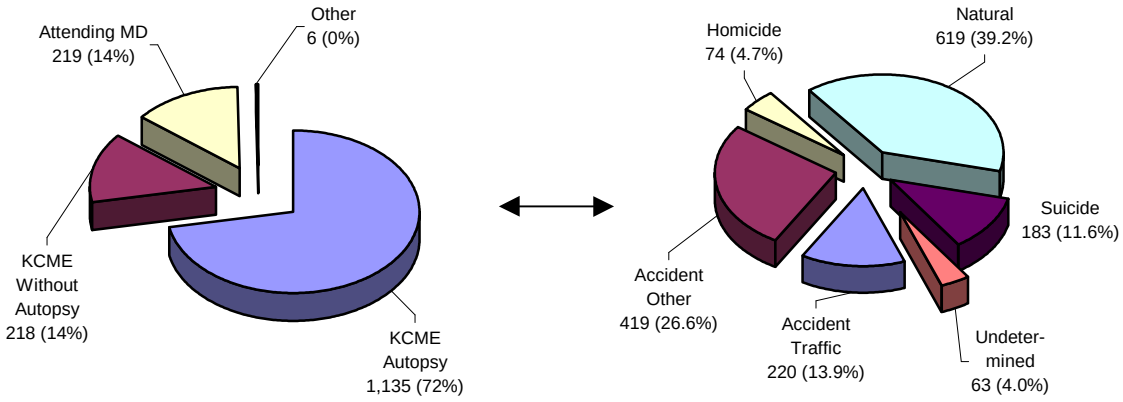


Table 1-2 Method of Certification and Manner of Death

CERTIFICATION	MANNER OF DEATH						TOTAL	PERCENT
	A	T	H	N	S	U		
KCME Autopsies	290	205	64	343	171	62	1,135	72%
KCME External Exams	55	14	0	136	12	1	218	14%
KCME Other	1	0	10 [7]	0	0	0	6	0%
Attending Physician	73	1	0	140	0	0	219	14%
Totals	419	220	74	619	183	63	1,578	

Graph 1-3 Method of Certification for All Medical Examiner Jurisdiction Cases



[7] Note: In 2001, the remains of victims from five (5) Homicide Deaths, were returned to the county(s) where the original injuries occurred. Being a Regional Trauma Center, King County receives victims of violence from surrounding counties. By prior agreement, remains of these victims are returned to the originating county for autopsy by the Medical Examiner of record.

MANNER OF DEATH IN 2001
King County Medical Examiner General Cases

Table 1-3 Gender and Manner of Death

	MANNER OF DEATH							
GENDER	A	T	H	N	S	U	TOTAL	PERCENT
Male	279	141	58	419	155	31	1,083	68.6%
Female	140	79	16	200	28	32	495	31.4%
Total	419	220	74	619	183	63	1,578	

Graph 1-4 Gender and Manner of Death

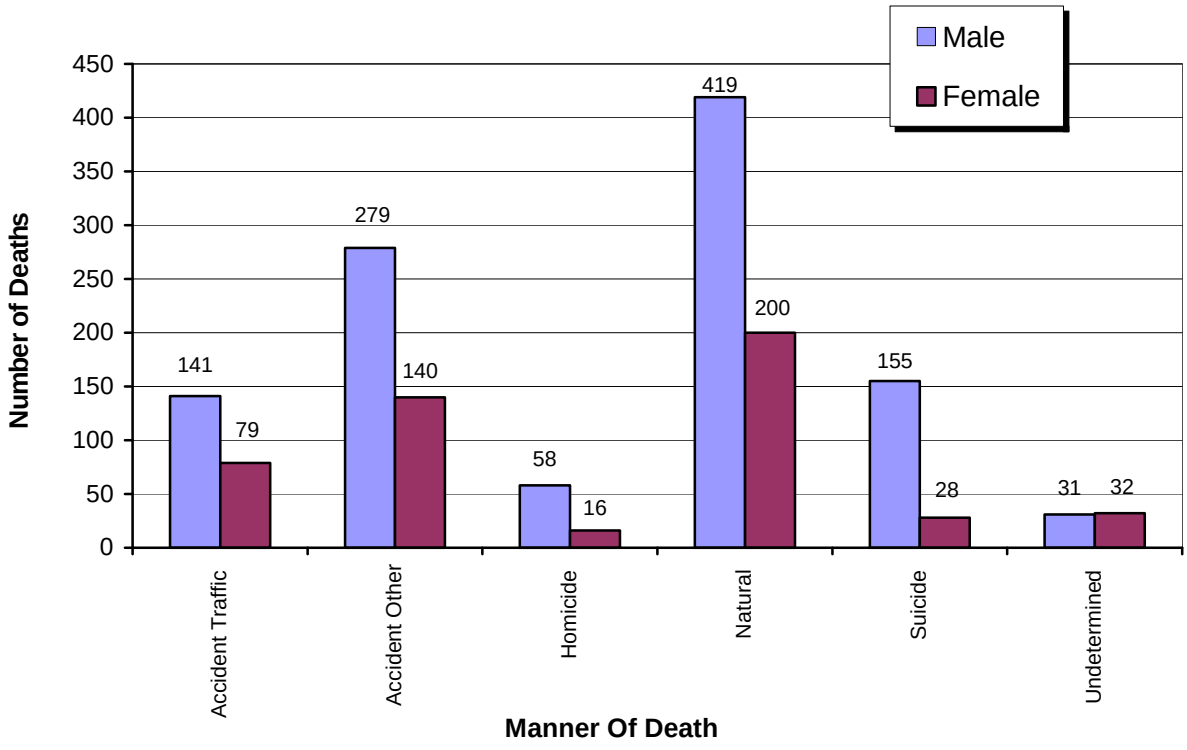


Table 1-4 Age and Manner of Death

AGE/GENDER	MANNER OF DEATH A	T	H	N	S	U	SUB TOTAL	TOTAL	PERCENT
Under 1 year								37	2.3%
Male	*5*	*2*	*0*	*14*	*0*	*1*	*22*		
Female	*0*	*2*	*0*	*13*	*0*	*0*	*15*		
1-5 years								13	0.8%
Male	*4*	*1*	*1*	*2*	*0*	*0*	*8*		
Female	*0*	*1*	*0*	*3*	*0*	*1*	*5*		
6-12 years								15	1.0%
Male	*3*	*1*	*0*	*3*	*0*	*0*	*7*		
Female	*4*	*2*	*0*	*1*	*0*	*1*	*8*		
13-15 years								14	0.9%
Male	*1*	*1*	*2*	*0*	*1*	*1*	*6*		
Female	*2*	*3*	*1*	*1*	*1*	*0*	*8*		
16-19 years								55	3.5%
Male	*6*	*16*	*5*	*1*	*9*	*2*	*39*		
Female	*2*	*9*	*2*	*1*	*2*	*0*	*16*		
20-29 years								168	10.6%
Male	*28*	*26*	*25*	*12*	*28*	*4*	*123*		
Female	*9*	*16*	*2*	*7*	*5*	*6*	*45*		
30-39 years								189	12.0%
Male	*42*	*30*	*8*	*34*	*32*	*6*	*152*		
Female	*11*	*7*	*3*	*6*	*4*	*6*	*37*		
40-49 years								288	18.3%
Male	*65*	*25*	*11*	*77*	*37*	*6*	*221*		
Female	*19*	*6*	*4*	*28*	*5*	*5*	*67*		
50-59 years								233	14.8%
Male	*33*	*11*	*3*	*92*	*23*	*7*	*169*		
Female	*11*	*11*	*3*	*31*	*4*	*4*	*64*		
60-69 years								154	9.8%
Male	*20*	*9*	*2*	*74*	*4*	*2*	*111*		
Female	*11*	*4*	*1*	*22*	*2*	*3*	*43*		
70-79 years								176	11.2%
Male	*27*	*8*	*1*	*70*	*9*	*1*	*116*		
Female	*9*	*11*	*0*	*36*	*2*	*2*	*60*		
80-89 years								174	11.0%
Male	*38*	*10*	*0*	*33*	*11*	*0*	*92*		
Female	*36*	*7*	*0*	*36*	*1*	*2*	*82*		
90+ years								59	3.7%
Male	*7*	*1*	*0*	*7*	*1*	*0*	*16*		
Female	*26*	*0*	*0*	*15*	*2*	*0*	*43*		
Unknown								3	0.2%
Male	*0*	*0*	*0*	*0*	*0*	*1*	*1*		
Female	*0*	*0*	*0*	*0*	*0*	*2*	*2*		
Total	419	220	74	619	183	63		1578	

Table 1-5 Race and Manner of Death

RACE & GENDER	MANNER OF DEATH						SUB TOTAL	TOTAL	PERCENT
	A	T	H	N	S	U			
White								1,320	83.7%
Male	242	120	34	346	141	23	906		
Female	128	59	11	167	24	25	414		
Black								110	7.0%
Male	12	5	20	35	3	5	80		
Female	3	8	2	15	0	2	30		
Asian								80	5.1%
Male	12	7	4	20	9	2	54		
Female	4	7	2	9	3	1	26		
Native American								33	2.1%
Male	2	3	0	11	2	0	18		
Female	5	2	0	6	1	1	15		
Other								35	2.2%
Male	11	6	0	7	0	1	25		
Female	0	3	1	3	0	3	10		
Total	419	220	74	619	183	63		1,578	

Table 1-6 Marital Status and Manner of Death

MARITAL STATUS & GENDER	MANNER OF DEATH A	T	H	N	S	U	SUB TOTAL	TOTAL	PERCENT
Never Married	137	98	45	200	72	28		580	36.8%
Male	*109*	*66*	*38*	*149*	*62*	*16*	*440*		
Female	*28*	*32*	*7*	*51*	*10*	*12*	*140*		
Married	122	58	15	141	61	10		407	25.8%
Male	*90*	*38*	*11*	*102*	*51*	*3*	*295*		
Female	*32*	*20*	*4*	*39*	*10*	*7*	*112*		
Divorced	75	37	12	155	38	14		331	21.0%
Male	*52*	*24*	*8*	*113*	*33*	*7*	*237*		
Female	*23*	*13*	*4*	*42*	*5*	*7*	*94*		
Widowed	78	21	0	89	11	6		205	13.0%
Male	*22*	*8*	*0*	*27*	*8*	*2*	*67*		
Female	*56*	*13*	*0*	*62*	*3*	*4*	*138*		
Unknown	7	6	2	34	1	5		55	3.5%
Male	*6*	*5*	*1*	*28*	*1*	*3*	*44*		
Female	*1*	*1*	*1*	*6*	*0*	*0*	*9*		
Unknown	*0*	*0*	*0*	*0*	*0*	*2*	*2*		
Total	419	220	74	619	183	63		1578	

Graph 1-5 Marital Status and Manner of Death

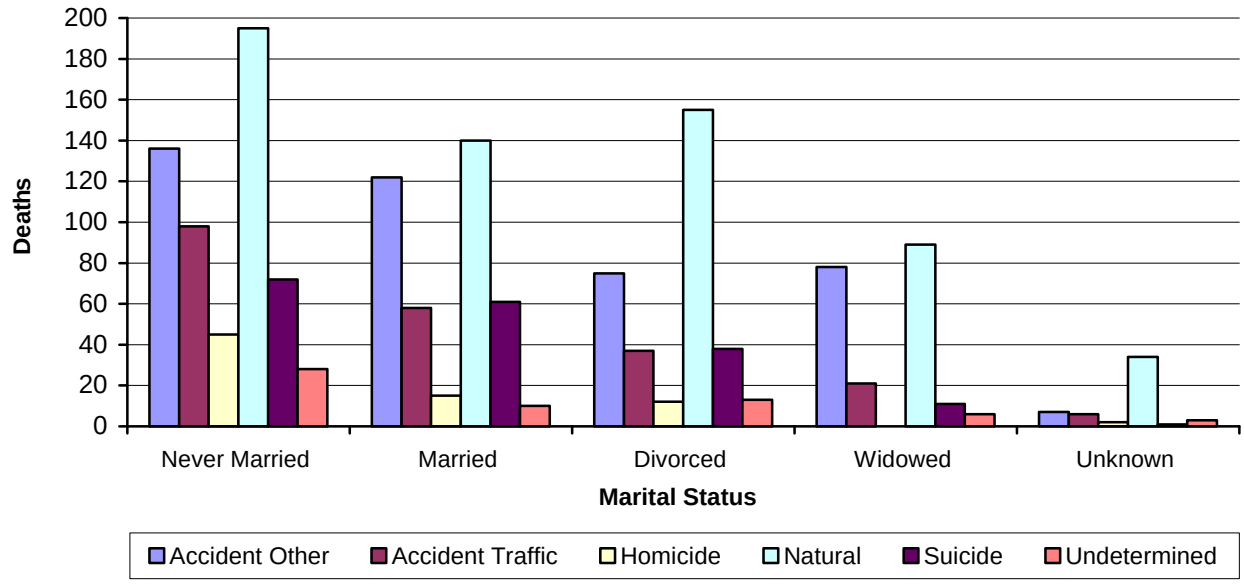


Table 1-7 Month and Manner of Death

MONTH	MANNER OF DEATH A	T	H	N	S	U	TOTAL	PERCENT
Previous Year	1	0	0	10	2	2	15	1.0%
January	42	13	5	48	19	15	142	9.0%
February	30	13	3	62	18	8	134	8.5%
March	40	21	11	53	17	1	143	9.1%
April	36	18	6	52	18	5	135	8.6%
May	32	17	6	51	11	6	123	7.8%
June	37	17	2	46	15	5	122	7.7%
July	31	27	8	51	14	5	136	8.6%
August	43	22	16	51	19	1	152	9.6%
September	34	12	1	51	11	6	115	7.3%
October	28	20	9	49	18	3	127	8.0%
November	36	20	5	41	12	1	115	7.3%
December	29	20	2	54	9	2	116	7.4%
Unknown	0	0	0	0	0	3	3	0.2%
Total	419	220	74	619	183	63	1,578	

Graph 1-6 Month and Manner of Death

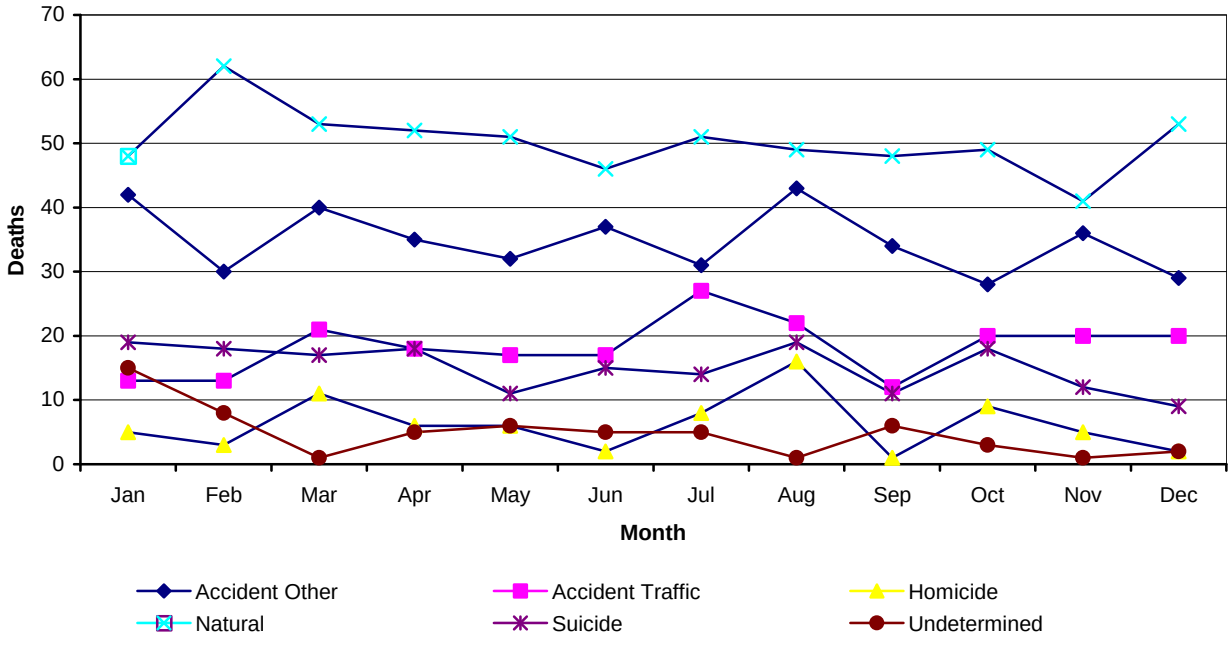


Table 1-8 Nearest Incorporated City to the Fatal Incident [8]

CITY	MANNER OF DEATH A	T	H	S	U	TOTAL	PERCENT
Algona	0	0	0	0	0	0	0.0%
Auburn	13	14	2	10	5	44	4.6%
Bellevue	14	6	1	9	1	31	3.2%
Black Diamond	1	0	0	1	0	2	0.2%
Bothell	5	2	1	3	0	11	1.2%
Burien	4	1	0	4	0	9	0.9%
Carnation	0	1	0	1	0	2	0.2%
Clyde Hill	0	0	0	0	1	1	0.1%
Covington	1	2	0	0	0	3	0.3%
Des Moines	0	1	5	1	0	7	0.7%
Duvall	1	2	0	0	1	4	0.4%
Enumclaw	2	6	1	0	1	10	1.0%
Fall City	1	1	0	1	0	3	0.3%
Federal Way	13	6	4	6	2	31	3.2%
Issaquah	5	1	0	3	0	9	0.9%
Kenmore	2	0	0	0	0	2	0.2%
Kent	18	9	2	13	4	46	4.8%
Kirkland	6	0	1	6	1	14	1.5%
Lake Forrest Park	0	2	0	1	0	3	0.3%
Maple Valley	2	3	2	2	1	10	1.0%
Maury Island	0	0	0	0	0	0	0.0%
Medina	0	0	0	0	0	0	0.0%
Mercer Island	2	1	1	0	2	6	0.6%
Newcastle	3	0	0	0	0	3	0.3%
Normandy Park	2	0	0	0	0	2	0.2%
North Bend	3	6	0	5	3	17	1.8%

[8] Note: Table 1-8 does not include cases where manner of death is "Natural".

Table 1-8 (con't) Nearest Incorporated city to the Fatal Incident [8]

CITY	MANNER OF DEATH A	T	H	S	U	TOTAL	PERCENT
Pacific	0	0	0	1	0	1	0.1%
Preston	0	0	0	0	0	0	0.0%
Ravensdale	0	1	0	0	0	1	0.1%
Redmond	3	1	0	7	0	11	1.2%
Renton	7	5	6	18	3	39	4.1%
Sammamish	2	1	0	0	0	3	0.3%
SeaTac	3	4	0	3	0	10	1.0%
Seattle	184	44	33	63	31	355	37.0%
Shoreline	12	2	1	6	0	21	2.2%
Skykomish	0	2	0	0	0	2	0.2%
Snoqualmie	3	3	0	2	0	8	0.8%
Sultan	0	0	1	0	0	1	0.1%
Tukwila	7	9	2	1	1	20	2.1%
Vashon Island	3	3	0	1	0	7	0.7%
Woodinville	3	3	2	2	0	10	1.0%
Yarrow Point	0	0	0	0	0	0	0.0%
Unincorporated King County	0	0	1	1	1	3	0.3%
Outside of King County	94	78	7	12	2	193	20.1%
Unknown Location [9]	0	0	0	0	3	3	0.3%
Totals	419	220	74	183	63	959	

[8] Note: Table 1-8 does not include cases where manner of death is "Natural".

[9] Location of death could not be determined as the place of death. Therefore, place of death could be different from the location of death.

OUT OF COUNTY CASES IN 2001

Within King County are several major hospitals and trauma centers that serve the entire Pacific Northwest and western United States. Consequently, there are numerous deaths each year where the incident leading to death occurred outside of King County. Because death occurred within King County, it comes under the jurisdiction of the King County Medical Examiner. In 2001 there were 193 deaths (20.1%) where the incident (excluding "Natural" deaths) occurred out of county. Table 1-9 displays these deaths by incident location and manner.

Table 1-9 Fatal Incident Occurred Outside of King County [8]

	MANNER OF DEATH					
INCIDENT LOCATION	A	T	H	S	U	TOTAL
Alaska	15	0	0	0	0	15
Arizona	1	0	0	0	0	1
California	1	0	0	0	0	1
Hawaii	0	0	0	0	0	0
Idaho	2	1	0	0	0	3
Oregon	0	1	0	0	0	1
Montana	0	1	0	0	0	1
Nevada	0	0	0	0	0	0
Washington						
Kitsap County	9	10	2	1	0	22
Lewis County	4	2	0	0	0	6
Pierce County	11	4	0	1	0	16
Snohomish County	14	19	4	5	0	42
Thurston County	1	3	0	1	0	5
Other Counties	34	36	1	4	2	77
Outside of the Country	2	1	0	0	0	3
Total	94	78	7	12	2	193

[8] Note: Table 1-9 does not include cases where manner of death is "Natural".